

## **New River Case Study**

*“...Being realistic, I strongly doubt any one body of government, spurred by even the most enthusiastic leaders, will accomplish a satisfactory and positive conclusion to the New River dilemma. But, if the right people, and for the right reasons, collectively come together from Imperial County, the state of California and our federal government, and each shoulders the responsibility that common decency and financial ability would dictate, we might in our lifetimes, see such a project take place...” Imperial Valley Press, 1992*

The New River is located in Imperial County at the southeastern tip of California at the intersection of Calexico on United States (U.S.) side and Mexicali in Mexico. It has been called the “dirtiest river in the United States.” The present day channel of the New River was created in 1905-07 when the Colorado River washed out diversionary works, and the entire Colorado River flow coursed into the Salton Basin, creating the New and Alamo River channels and the present day Salton Sea, thus the name, “new” river.

Following its creation and the inception of irrigated agricultural production in the early 1900's, the New River was primarily used to convey agricultural drainage from the Imperial and Mexicali Valleys. It also has conveyed treated sewage, and most importantly, raw sewage, largely originating from the border city of Mexicali in Mexico.

The early documented history of New River pollution is sketchy, but is believed to be closely aligned with population growth. In 1920, total population of Mexicali was less than 7,000. In 1955, it was estimated to be 25,000. In 1975, Mexicali's population jumped to over 100,000 people. The current population is reported to be less than 500,000 people by the Mexican government, but some observers believe it is closer to 1,000,000. Mexicali's population includes many Mexican citizens who go north to the border in search of work in agriculture and assembly plants. Many live in substandard housing, without water, electricity, or sewer connections, or health services. Mexicali's water treatment plant is inadequate and results in poorly filtered and practically untreated water being released. The released water flows north through farmlands and ends at the Salton Sea.

A focal point of early complaints regarding New River pollution was odor. In the early 1950's, the stench of the river near the U.S./Mexico boundary, particularly at night, was oftentimes overpowering. Beginning around 1956, the flows of the New River at the boundary increased considerably due to development of agricultural drainage flows from Mexicali Valley. This dilution water temporarily alleviated the odor problems, but in the 1960's, the problem became increasingly noticeable as sewage loading increased with population. Similarly, due to the recent industrial growth in Mexico, industry is believed to also be an increasingly significant source of New River pollution. Along with untreated human waste from Mexicali, Mexico, river flows also carry untreated waste from U.S. owned factories operating in Mexico, a “toxic stew” according to the Los Angeles times.

The New River flow is approximately 200 cubic feet per second (cfs) at the U.S./Mexico International Boundary. Its flow at the outlet to the Salton Sea is approximately 800 cfs, which makes it one of the two main tributaries to the Salton Sea, the other main tributary being the Alamo River. The Salton Sea is the largest inland body of water in California, being 35 miles long north to south, providing vast aquatic habitat to many species of both fish and fowl. The Salton Sea is noted for its sportsfishing opportunities and attracts anglers from throughout the world.

The history of New River pollution is one of frustration and anger. For decades, the problems were simply ignored, although five U.S. Presidents promised that corrective actions would be taken. As the pollution became increasingly noticeable in the 1960's, affected U.S. communities demanded prompt action from Mexico as well as responsible U.S. government agencies. Under intense attacks, officials from both countries made promises that could not be fulfilled, further fueling the discontent. Complicating matters is the fact that the magnitude of the pollution and potential solutions had been grossly underestimated, again by both countries. In fact, it was not until the mid 1980's that the extent of the problem was finally recognized, and Mexico and the U.S. began to work cooperatively to address the issues involved.

Along with pollution from Mexico, the New River has also suffered by pollution occurring in the U.S. Even into the 1960's, some U.S. cities were still discharging raw sewage into the river. Three Imperial County dumps were located in the floodplain of the New River (and still are) and until rechannelization of the river, were just as bad as similar dumps in Mexicali. The city of Calexico itself was grown steadily through the years and currently has a population in excess of 300,000. Furthermore, for a long time the New River pollution from Mexico seemed a ready excuse for polluters on the U.S. side desiring to continue business as usual. To some extent, the feeling has been that the New River is as good a place as any to dump anything and everything, and for some people, these notion still prevails on both sides of the River.

In 1994, community groups demanded information regarding the U.S. companies operating along the border. The U.S. Environmental Protection Agency subpoenaed companies for the data. Many companies refused to comply with requests for a toxic inventory (a listing of which chemicals are being used). Those companies that did comply with the request showed high usage of toxic chemicals. Although required by law to have chemical treatment systems, few companies operating along the border have complied.

The water treatment plant on the Mexico side inadequate, resulting in poorly filtered and nearly untreated releases. Released water flows north through farmlands and ends at Salton Sea. Efforts to catalog some of the health problems encountered by those living along the New River have documented odors, skin rashes, respiratory problems and stomach ailments. One study by the U.S. Public Health Service did not find a basis for human health concerns, based on lack of human contact with River water. The study did not look at consumption of New River fish by local residents. The Imperial County Health Department has found extremely high levels of ddt, toxaphene, and pcbs.

Much remains to be done to address the environmental justice concerns that surround the New River. Many people believe that the concerns will not be satisfactorily addressed by actions taken solely in Mexico. Lack of infrastructure, the absence of an effectual enforcement program, and the incidence of unsophisticated waste disposal from low cost housing developments along the New River are a few of the factors that would make it difficult, if not impossible for issues to be addressed. It is likely unrealistic to believe that the issues could be addressed solely by the United States. The cooperation of both governments appears to be key to long-term solutions.